

BOOK REVIEW

Jungle Bees and Wasps of Barro Colorado Island, Panama, by Phil Rau. 338 pp., 120 illus., octavo, cloth. Kirkwood, Mo. Published by author, 1933. \$2.75.

This review is not intended to be a critical examination by a professional Hymenopterist of technical subject matter. Instead, it is hoped that it may be accepted merely as an appreciation, from one who enjoys travel books, of an exceedingly interesting and charmingly written narrative of entomological exploration. While the volume primarily is an account of the ecology and biology of social and solitary wasps and stingless bees of a jungle island in Panama, yet, it also contains many data on their attributes and adaptations and comparison of their habits and instincts with those of their near relatives in the temperate region. Consideration is given to the Stingless bees, the *Polybia* wasps, the Solitary wasps, the Great Carpenter bee, two species of *Polistes* wasps, and also various paper making Social wasps. There are likewise ecological and behavior notes on the other principal orders of insects and on spiders and myriapods, as well as a discussion of mind as a forerunner in evolution. Probably of greatest popular interest is the non-entomological chapter reporting in detail on the events of an exploration of New Limon. The book is trenchant and vigorous, sincere and illuminating. Although packed with information it is presented in a form which makes it arresting and readable even to those who might have only a casual interest in the subject. The series of word pictures descriptive of various phases of the natural history of the Island are presented with a real sensitiveness to beauty and atmosphere. Under these fortunate conditions, with the author's heart and imagination deeply stirred, a journey like this becomes to him an epoch of exploration.—J. S. WADE.